

REMARKS

The applicant would like to thank the Examiner for his acceptance of the 06/28/2005 terminal disclaimer and the corresponding withdrawal of the double patenting rejection.

I. STATUS OF CLAIMS

By present Amendment claim 1 has been amended. No new matter is believed to have been added. Accordingly, claims 1-21 are now pending in the present application.

II. ART REJECTIONS

A. Claims 1-2, 4-6, 12, and 15-21

In the Office Action, the Examiner rejected claims 1-2, 4-6, 12, and 15-21 under 35 U.S.C. § 103(a) as being unpatentable over U.S.P.N. 4,029,578 issued to Turk ("Turk") in view of U.S.P.N. 4,118,313 issued to Hadamovsky ("Hadamovsky"). This rejection is respectfully traversed.

Turk does not describe a first baffle inclining at a first angle between 10 and 45 degrees, and the Examiner conceded as much. However, the Examiner stated that Hadamovsky teaches such a baffle.

Without agreeing with the Examiner's argument, claim 1 has been amended to more precisely recite the structure of the baffle in the present application. The baffle is now required to extend from a first side to a second side, and incline upwardly from said first side toward said second side. The first side and the second side are distinguished by the gap formed between the second side and the baffle.

In contrast, baffle 7 of Figure 3 of Hadamovsky inclines downwardly from the first side towards the second side. The baffle of Hadamovsky cannot be viewed as inclining upwardly from a first side to a second side, because a gap would then formed between the first side and the baffle, not the second side and the baffle as recited in claim 1. Therefore, Hadamovsky fails to make up for the deficiencies of Turk.

Further, there is no motivation to modify the baffle 7 of Hadamovsky so that it inclines upwardly from its first side to the second side. The direction of downward inclination of baffle 7

in Hadamovsky allows heavier matter to flow down the passageway, while a lighter stream of matter can flow upwardly (col. 8, lines 6-10). Therefore, reversing the direction of the baffle in Hadamovsky would serve to make the device unusable for its intended purpose, because heavier matter would simply become trapped between the baffle and the wall, preventing mixing of the two types of matter. Reversing the direction of the baffle in Hadamovsky would cause the system not to work for its intended purposes, evidencing a lack of motivation to make such a change. MPEP § 2143.01(v), ("If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification").

Regarding claim 5, the Examiner conceded that Turk fails to teach modifying the surface of the first baffle to promote precipitation, but stated that

"it would have been obvious . . . to modify the surface of the baffles of the Turk reference **by tilting them at certain angle** as taught by the Hadamovsky reference in order to keep the height of the contact chamber small" (emphasis added, Office Action dated 09/06/2005, page 4).

Tilting of a baffle is not a modification of the **surface** of a baffle as recited in Claim 5. Although tilting a baffle inherently tilts the surface of a baffle, tilting does not **modify the surface**.

Accordingly, since neither Turk nor Hadamovsky, taken alone or in combination, teaches or suggests the claimed elements, claims 1-2, 4-6, 12, and 15-21 are patentably distinguishable from the cited prior art. The Examiner is respectfully requested to withdraw this rejection.

B. Claims 7 and 8

The Examiner rejected claims 7 and 8 under 35 U.S.C. § 103(a) as being unpatentable over Turk in view of Hadamovsky, and in further view of U.S.P.N. 4,028,246 issued to Lund et al. ("Lund"). This rejection is respectfully traversed.

Claims 7 and 8 both depend from claim 1, and because Lund does not make up for the deficiencies of either Turk or Hadamovsky in teaching the structure of the baffles of the currently claimed invention, claims 7 and 8 are patentably distinguishable from the cited prior art.

C. Claim 9

The Examiner rejected claim 9 under 35 U.S.C. § 103(a) as being unpatentable over Turk in view of Hadamovsky, in further view of Lund, and in further view of U.S.P.N. 5,683,576 issued to Olsen ("Olsen"). This rejection is respectfully traversed.

First, claim 9 depends from claim 1, and because Olsen does not make up for the deficiencies of Turk, Hadamovsky, Lund, or their combinations, in teaching the structure of the baffles of the currently claimed invention, claim 9 is patentably distinguishable from the cited prior art.

Second, the Examiner conceded that the combination of Turk, Hadamovsky and Lund fail to teach "where the ultrasonic emitter is placed at an angle relative to the first and second baffles such that ultrasonic signal is directed through the eddy." The Examiner then alleged that Turk and Olsen could be combined to render obvious the claimed invention of the present application. The Examiner stated that it would have been obvious to

"modify the Turk reference by placing ultrasonic emitter within the chamber as taught by the Olsen reference since the sonic waves disburse fine bubbles into microbubbles causing a greater mass transfer that result in increasing efficiency of water treatment" (Office Action dated 09/06/2005, page 7).

Olsen does not make up for the deficiencies of Turk, Hadamovsky, Lund, or their combinations. Olsen does not teach or suggest the use of a sonic wave generator **directed through eddies**, as recited in claim 9, because there are no such eddies present in the system of Olsen.

The system of Olsen contains a CT chamber that uses an air diffuser and a sonic wave generator in conjunction with an ozone generator. The examiner relies on Hadamovsky for the use of inclined baffles in a water treatment system. Eddies are created in Hadamovsky by inclined baffles, but because there are no inclined baffles in the system of Olsen, there are also no eddies being created. Because there are no eddies being created in the system of Olsen, Olsen does not teach or suggest the use of a sonic wave generator directed through these non-existent

eddies. Hadamovsky also does not teach or suggest directing a sonic wave generator to eddies, because Hadamovsky does not contemplate using any sonic wave generators.

D. Claim 3

The Examiner rejected claim 3 under 35 U.S.C. § 103(a) as being unpatentable over Turk in view of Hadamovsky as applied to claim 1, and in further view of U.S.P.N. 5,091,118 issued to Burgher ("Burgher"). This rejection is respectfully traversed.

Claim 3 depends from claim 1, and because Burgher does not make up for the deficiencies of Turk, Hadamovsky, or their combinations in teaching the structure of the baffles of the currently claimed invention, claim 3 is patentably distinguishable from the cited prior art.

E. Claims 10 and 11

The Examiner rejected claim 10 and 11 under 35 U.S.C. § 103(a) as being unpatentable over Turk in view of Hadamovsky, and in further view of U.S.P.N. 5,753,106 issued to Schenck ("Schenck").

Claims 10 and 11 both depend from claim 1, and because Schenck does make up for the deficiencies of either Turk or Hadamovsky in teaching the structure of the baffles of the currently claimed invention, claims 10 and 11 are patentably distinguishable over the cited prior art.

F. Claims 13 and 14

The Examiner rejected claims 13 and 14 under 35 U.S.C. § 103(a) as being unpatentable over Turk in view of Hadamovsky, in further view of Burgher as applied to claim 3, and in further view of Lund. This rejection is respectfully traversed.

Claims 13 and 14 depend from claim 1, and because neither Burgher nor Lund makes up for the deficiencies of Turk, Hadamovsky, or their combinations in teaching the structure of the baffles of the currently claimed invention, claims 13 and 14 are patentably distinguishable over the cited prior art.

In view of the foregoing remarks, Applicants respectfully request the reconsideration of this application and the timely allowance of the pending claims.

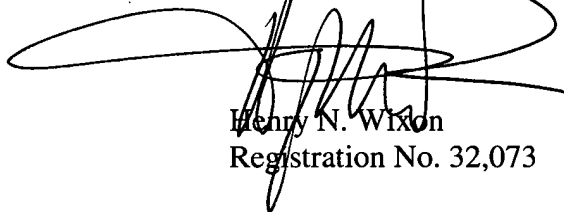
AUTHORIZATION

The Commissioner is hereby authorized to charge any additional fees which may be required for this Amendment, or credit any overpayment to deposit account no. 08-0219.

In the event that an extension of time is required, or which may be required in addition to that requested in a petition for an extension of time, the Commissioner is requested to grant a petition for that extension of time which is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to deposit account no. 08-0219.

Respectfully submitted,

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